State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-831
Relating to Certification of New Motor Vehicles

FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1999 model-year Ford Motor Company exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Fuel Flexible (E85 Ethanol, Gasoline)

Certification Fuel: E85 Ethanol, Indolene

Engine Family: XFMXT03.02DC Displacement: 3.0 Liters (181 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Dual Three Way Catalytic Converters
Three Way Catalytic Converter
Dual Heated Oxygen Sensors
Heated Oxygen Sensor
Exhaust Gas Recirculation
Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) TLEV certification exhaust emission standards for this engine family in grams per mile are: (The standards in parentheses are for gasoline.)

Loaded Vehicle Weight (lbs)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
3751-5750	50,000	0.160 (0.32)	4.4 (4.4)	0.7 (0.7)	0.018 (0.018)	12.5 (12.5)
	100,000	0.200 (0.40)	5.5 (5.5)	0.9 (0.9)	0.023 (0.023)	n/a

Reactivity Adjustment Factor for NMOG Mass Emission (E85 Ethanol Fuel): 0.83

Reactivity Adjustment Factor for NMOG Mass Emission (Gasoline): 1.00

The certification exhaust emission values set forth for non-methane organic gases (NMOG) reflect application of the above-mentioned reactivity adjustment factors for 1999 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are: (The values in parentheses are for gasoline.)

Loaded Vehicle Weight (lbs)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
3751-5750	50,000	0.119 (0.12)	2.8 (2.6)	0.1 (0.1)	0.002 (0.001)	8.4 (7.5)
	100,000	0.131 (0.15)	3.6 (3.4)	0.1 (0.1)	0.003 (0.001)	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model- Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 17th day of July 1998.

Raphael Susnowitz

for R. B. Summerfield, Chief
Mobile Source Operations Division

E.O.# A-10-831

1999 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: Ford Motor Company Exhaust Engine Family: XFMXT03.02DC

Evap Standard: 50K X Useful Life with R/L ____ Evap Family: XFMXE0155FBE DRIVE ND

Exhaust Std: Tier 0 _ Tier 1 _ TLEV X LEV _ ULEV _ ZEV _ ; EPA Tier 0 ___ Tier 1 __ Evap Test Procd: Federal

Vehicle Class(es): PC _ LDT1 _ LDT2 X MDV1 _ MDV2 _ MDV3 _ MDV4 _ MDV5 _ RL Test Proc: Point Source

Single Cert Std for Multi-Class Eng Fam: N/A (specify N/A, LDT1, MDV1, MDV2, MDV3, MDV4)

Exh Cert Fuel(s): Indo X Ph2 _ Diesel: 13 CCR 2282 _ or 40 CFR 86.113-90 _ or -94 _
M85 _ CNG _ LPG _ Other (specify) E85

Fuel Type(s): Dedicated _ Flex-Fuel X Dual-Fuel _ Gasoline X Diesel _ M85 _ E85 X
CNG ___ LNG ___ LPG ___ Other (specify) _____ Service Accum: Mfr ADP

Hybrid: Type A ___ B ___ C ___, APU Cycle (e.g., Otto, Diesel, Turbine) _____ Rated HP 145@5000 RPM

Engine Config: V-6 Liter (CID): 3.0 (181 in³) Valves/Cyl 2 NMOG T.P. Standard

Engine: Front X Mid.__ Rear__ Drive: FWD __ RWD X 4WD-FT _ 4WD-PT X

Exhaust ECS & Special Features: SFI/2HO2S/EGR/2TWC, TWC, HO2S
(Use abbreviations per SAE J1930, Sep 91)

Engine Code	Vehicle Models	Trans	ETW	DPA (A/N)	Ignition (PCM) Part No. -12A650-	EGR System Part No. -9D475-	Catalyst Part No.
9LAABHB(A/N)	Mazda 4X2	A4	3750	12.4 /11.3	XL5F-KB	F87E-GA	F87A-5F250-CE(CC)
	Ranger 4X2	A	3750	12.4/11.3	XL5F-KB	F87E-GA	XL54-5F250-CA(CC alt)
	Ranger 4X2	A	3875	12.4/11.3	XL5F-KB	F87E-GA	F87A-5E212-ED(UB)
							XL54-5E212-EA(UB alt)
9LAABJB(A/N)	Mazda 4X4	A	3875	14.3/13.0	XL5F-LB	F87E-GA	
	Mazda 4X4	A	4000	14.3/13.0	XL5F-LB	F87E-GA	
	Mazda 4X4	A	4250	14.3/13.0	XL5F-LB	F87E-GA	
	Ranger 4X4	A	3875	14.3/13.0	XL5F-LB	F87E-GA	
	Ranger 4X4	A	4000	14.3/13.0	XL5F-LB	F87E-GA	
	Ranger 4X4	A	4250	14.3/13.0	XL5F-LB	F87E-GA	
9LAMBBB(A/N)	Mazda 4X4	M5	3750	14.3/13.0	XL5F-PB	F87E-GA	
	Mazda 4X4	M	3875	14.3/13.0	XL5F-PB	F87E-GA	
	Mazda 4X4	M	4000	14.3/13.0	XL5F-PB	F87E-GA	
	Ranger 4X4	M	3750	14.3/13.0	XL5F-PB	F87E-GA	
	Ranger 4X4	M	3875	14.3/13.0	XL5F-PB	F87E-GA	
	Ranger 4X4	M	4000	14.3/13.0	XL5F-PB	F87E-GA	
9LAMBAB(A/N)	Ranger 4X2	M	3750	12.4/11.3	XL5F-YB	F87E-GA	